REMARKS

Objection to the Specification

The specification was objected to as inappropriately including attorney docket numbers. Applicants appreciate the Examiner's keen observation. By this amendment, the attorney docket numbers have been removed and replaced with the corresponding U.S. Patent Application Numbers and filing dates. Furthermore, in the specification, several editorial changes have been made. The changes are clerical in nature and include no new matter. Approval and entry of the specification as amended are respectfully requested.

Rejection under 35 U.S.C. § 102

In the aforementioned Office Action, claims 1-7 and 9 were also rejected under 35 U.S.C. § 102(e) as being anticipated by *Leung et al.* (U.S. Patent No. 6,195,546). In the rejection, the Examiner referred to *Leung et al.*, and alleged that all the features as claimed by Applicants are found in *Leung et al.*

Leung et al. teaches a unicast system dealing with updating subscription information of a mobile station. More specifically, *Leung et al.* is concerned with updating the NAM (Number Assignment Module) of each individual mobile unit through an OTAPA (Over the Air Parameter Administration) process. In contrast, Applicants' claimed invention pertains to a multicast system serving broadcast content to a multiplicity of receivers. Applicants respectfully submit that *Leung et al.* and Applicants' claimed invention are two very different systems. As such, vast differences exist between *Leung et al.* and Applicants' claims.

To begin with, Applicants' claim 1 recites, *inter alia*, of "generating a broadcast service protocol message."

In the art of telecommunications, the terms "broadcast" and "multicast" are very much synonymous. A broadcast system is fundamentally different from a unicast counterpart. For the former, information content is sent to a multiplicity of receivers *en masse*. Furthermore, transmissions are mostly unidirectional from the broadcast source to the multiple receivers. That is, reverse traffic is limited, if at all existent. Since only a very small portion of the bandwidth needs to be reserved for the reverse traffic, the available bandwidth can almost entirely be allocated to the broadcast source's need. Consequently, data intensive transmissions

can be made possible. This has been explained in Applicants' disclosure (e.g., page 2, paragraph [1004], lines 4-11, and page 5, paragraph [1034], lines 3-9), and is repeated herein for the Examiner's reference.

On the contrary, in a unicast system, communications between the sender and the receiver are bidirectional. As such, at least two communications channels need to be carved out for even one single instance of usage. As the number of receivers increases, the number of communications channels also increases. Useful bandwidths are limited. Consequently, in a unicast system, data rate intensive transmissions are seriously hampered, if at all possible. In general, massive data transfers at rapid rates, such as video streaming of the high-quality type, are not normally sent in a unicast system.

Leung et al. is not at all dealing with broadcast. *Leung et al.* does not intend to send signals to a multiplicity of receivers *en masse*, and is so implemented. In fact, *Leung et al.* goes through great lengths to make certain that the message sent is not received by anyone else other than the intended receiver. To accomplish this end, *Leung et al.* calls for layers of security measures. The normal security precaution of reaching the mobile station via a password is not sufficient (column 6, line 61 to column 7, line 30 of *Leung et al.*). Additionally, layers of security protocol steps are instituted. When the mobile station is reached for an OTAPA session, the mobile station challenges the base station for additional verification. The base station then turns around and elicits other entities for assistance to neutralize the challenge (column 12, lines 44-62 of *Leung et al.*). In short, *Leung et al.*'s OTAPA session does not have attributes characteristic that of a broadcast.

If that is not enough, the entire OTAPA process of *Leung et al.* is said to be performed without the knowledge of the mobile station's user (e.g., see column 8, lines 32-37 of *Leung et al.*). A broadcast session normally targets an audience of a large number and is not generally carried out stealthily without the knowledge of the audience, as in *Leung et al.*

During patent examination, Applicants are mindful that each claim term in a claim is given its broadest reasonable construction consistent with the specification. 37 C.F.R. § 1.56(b)(2)(ii). Here, for the reasons stated above, Applicants respectfully submit that under the broadest allowable construction consistent with the specification, *Leung et al.*'s "OTAPA process" is not and cannot be interpreted as a "broadcast service."

In rejecting claim 1, the Examiner contended (page 2, paragraph 3 of the Detailed Action) that *Leung et al.*'s base station generates a "protocol capability request message" and equated it with the "broadcast service protocol message" as claimed by Applicants.

There is no need for Applicants to expend words to explain what a "protocol capability request message" is. *Leung et al.* clearly explains it in column 7, lines 10-12 that "[t]he protocol capability request message basically ascertains the functionality supported by the mobile station." The functionality is the "functionality of the OTAPA methodology" which *Leung et al.* claims as its invention (column 6, lines 61-63 of Leung et. al.). Applicants respectfully submit that the "protocol capability request message" which ascertains the functionality of the OTAPA methodology by the mobile station is not and cannot be construed as the "broadcast service protocol message" as claimed by Applicants.

Not withstanding the distinguishable differences, Applicants have also amended claim 1 which now recites, among other things, of "transmitting the broadcast service protocol message to multiple receivers so as to allow each of the multiple receivers for processing broadcast content of the broadcast service." *Leung et al.* transmits to only one receiver and has no broadcast content to process. Accordingly, Applicants submit that amended claim 1 is not anticipated by *Leung et al.*

Along the same line of reasoning, independent claim 6, which has also been amended, is submitted to be distinguishable over *Leung et al.*

The receiving device of *Leung et al.* does not operate by "receiving a broadcast service parameter message," as claimed in claim 6. The system of *Leung et al.* does not have any "broadcast service parameter message" associated therewith, as previously explained.

Furthermore, the receiving device of *Leung et al.* does not operate by "extracting a service option number from the broadcast service parameter message," as claimed in claim 6. The service option number of *Leung et al.* is for the OTAPA protocol (column 8, lines 14-16 of *Leung et al.*) An OTAPA message is not a "broadcast service parameter message" as also explained above.

Moreover, amended claim 6 as amended additionally recites "initiating a protocol stack corresponding to the service option number for processing the broadcast service." The option

number and protocol stack in *Leung et al.* are not for "processing the broadcast service," as claimed in Applicants' amended claim 6, but for the OTAPA process.

Likewise, the same holds true for claim 9 which recites a wireless apparatus and is submitted to be distinguishable over *Leung et al.* That is, there is neither "means for receiving a broadcast service parameter message," "means for extracting a service option number from the broadcast service parameter message," nor "means for initiating a protocol stack corresponding to the service option number for processing broadcast content" found in *Leung et al.*

Independent claims 1, 6 and 9 are further submitted to be nonobvious over the prior art, including *Leung et al.*

First, *Leung et al.* teaches a unicast system and is silent on any broadcast features. it is inconceivable that a person of ordinary skill in the art, after studying *Leung et al.*, would have come up with the motivation for a broadcast system of sending a "broadcast service protocol message" different and separate from any unicast communications as claimed by Applicants.

In fact, modifying *Leung et al.*'s system in a manner as claimed by Applicants would be contrary to the teachings of *Leung et al.* As stated above, *Leung et al.* ensures one and only one receiver receives the intended message. Allowing more than one receiver to receive the message as in a broadcast system would defeat the purpose of *Leung et al.* which *Leung et al.* earnestly sought in the first place.

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. *In re Gordon*, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984). A person of ordinary skill in the art would not have modified *Leung et al.* contrary to the teachings of *Leung et al.*

For the foregoing reasons, independent claims 1, 6 and 9 are submitted to be patentable over *Leung et al.* Withdrawal of the Examiner's rejection is believed to be in order and is respectfully requested.

Rejection under 35 U.S.C. § 103

In the aforementioned Office Action, claims 8 and 10 were also rejected under 35 U.S.C. § 103(a) as unpatentable over *Leung et al.*

First, Applicants submit that claim 8 and 10 are dependent claims, dependent on independent claims 6 and 9, respectfully, are submitted to be patentable for the same reasons that independent claims 6 and 9 are believed to be patentable. In fact, the additional limitations recited in claims 8 and 10 make them even more patentable over the prior art. Nevertheless, applicants would like to address each of the rejections separately and individually.

With regard to claim 8, in the rejection, the Examiner conceded that *"Leung et al.* fails to explicitly teach the 'service parameter message defines' a video codec of the broadcast session." Nonetheless, the examiner took office notice that "different video codecs such as JPEG and MPEP *(sic)* standards different compression algorithms" (page 3, paragraph 5 of the Detailed Action).

Evidence generally notorious or capable of instant and unquestionable demonstration as well known can be taken as official notice. *In re Ahlert*, 424 F.2d 1088, 1091, 165 USPQ 418, 420 (C.C.P.A. 1970). However, an applicant has the right to demand showing of evidence as officially noticed. *In re Chevenard*, 139 F.2d 71, 60 USPQ 239, 241 (C.C.P.A. 1943). Failure to challenge the fact so noticed constitutes a waiver. *In re Sun*, 31 USPQ.2d 1451, 1455 (Fed Cir. 1993).

Here, Applicants' claim 8 recites "the broadcast service parameter message defines a video codec of the broadcast service," not merely the "service parameter message" as quoted by the Examiner (page 3, paragraph 8 of the Detailed Action). Read in conjunction with independent claim 6, the "codec for the broadcast service" is associated with "a service option number from the service broadcast service message." Applicants submit that such arrangement as claimed in claim 8 would have been nonobvious over any unidirectional broadcast counterparts, much less *Leung et al.*'s bi-directional OTAPA process.

Claim 8 recites a video codec defined by the broadcast service parameter message for uninterrupted execution. Most prior art arrangements, having no service broadcast service message to give directions, include codec which is non-continuous and mostly likely needs to be dynamically negotiated. Again, this has been explained in Applicants' disclosure and is repeated herein for the Examiner's reference (e.g., see page 18, paragraph [1081] of Applicants' disclosure). Applicant thus respectfully submits that "the broadcast service parameter message defines a video codec of the broadcast service" as claimed in Applicants' claim 8 is not generally

notorious or capable of instant and unquestionable demonstration, even in a unidirectional setting, let alone the bi-directional OTAPA process of *Leung et al.* Accordingly, pursuant to 35 C.F.R. § 1.104(d)(2), Applicants respectfully traverse the Examiner's officially noticed statement and request demonstration of such evidence.

In regard to the rejection of claim 10, the Examiner also conceded that *Leung et al.* fails to explicitly teach "means for receiving header compression information" as claimed by Applicants. Nonetheless, the Examiner referred to *Kweon et al.* (U.S. Patent No. 6,111,866) and contended that *Kweon et al.* teaches IP address and compression information. The Examiner then combined *Leung et al.* and *Kweon et al.* and stated that "one skilled in the art would have been motivated to negotiate the header compression information between mobile and network to improve throughput."

To begin with, there is no express teaching or implied suggestion found in the references that the two features be combined as suggested. Even if combined, Applicants respectfully submit that combining *Leung et al.* and *Kweon et al.* does not meet applicants' claim 10. *Leung et al.* is another one-to-one (e.g., see the Abstract of *Kweon et al.*) unicast system. Neither *Leung et al.* nor *Kweon et al.* is concerned with broadcast. The resultant combination does not have "means for extracting a service option number from the broadcast service parameter message," much less "means for initiating a protocol stack corresponding to the service option number for processing broadcast content." With claim limitation not found in the prior art, a *prima facie* case of obviousness cannot be established. MPEP § 2143.03.

For the foregoing reasons, Applicants respectfully submit that claim 8 is nonobvious over the prior art, and the Examiner's rejection should be withdrawn.

Conclusion

The cited and not relied upon references have been studied but found to be less relevant than the relied upon references.

In light of the above amendments and remarks, Applicants respectfully submit that claims 1-10 are distinguishably patentable over the prior art. The application is believed to be in condition for allowance. Reconsideration and an early allowance are respectfully requested.

Respectfully submitted,

Dated: March 7, 2005   By: _____
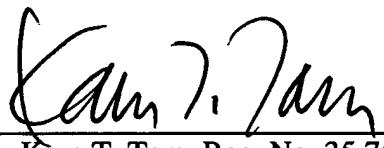
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